

Application No. 10/761,294
Docket No. 1020/0134PUS1
Reply AF dated Nov. 1, 2006

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method for determining an interior temperature based on a value for incident sun radiation recorded with a photo sensor and/or a surface temperature at a measuring area recorded with a temperature sensor,

wherein air circulation in front of the measuring area is determined, which, is weighted as a variable heat-transmission resistance, and is entered as a correction value into the recorded incident sun radiation,

wherein in a first measurement with the temperature sensor, a step response of the temperature sensor at zero air circulation is taken and recorded in response to a heat element being provided with a signal, and

wherein from the difference of the step response as compared to a second response the presence or absence of air circulation is determined, which determination is utilized for determining the interior temperature based on the correction value.

2. (original) The method according to claim 1, wherein with air circulation present, the step response on the temperature sensor shows a smaller impulse height and impulse width than a step response when no air circulation is present.

3. (previously presented) The method according to claim 1, wherein the heat element is in close proximity of and thermally coupled to the temperature sensor.

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4. (previously presented) The method according to claim 1, wherein the temperature sensor comprises:

at least one sensor for determining the surface temperature of the measuring area, and the heat element, which is thermally coupled with the at least one sensor.

5. (previously presented) The method according to claim 4, wherein the thermal coupling is achieved via a damping segment.

6. (previously presented) The method according to claim 4, wherein the damping segment is a foil with conduction tracks attached thereto.

7. (previously presented) The method according to claim 4,

wherein the temperature sensor is located in a housing and is arranged in an upper part of a foil, which serves as a substrate for the temperature sensor, and into which are injected at least the sensor for determining the surface temperature of the measuring area and the heat element, and

wherein the housing is closed off towards a lower portion thereof bottom with a casting compound, with contact pins leading through it.

8. (previously presented) The method according to claim 7, wherein the housing is made of infrared-permeable material, at least above an additional sensor for measuring the incident sun radiation, which is attached to the foil.

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9. (previously presented) The method according to claim 6,
 - wherein the temperature sensor is located in a housing,
 - wherein the foil is flexible and is folded and inserted into the housing, together with the attached sensor for determining the surface temperature of the measuring area and the heat element, and
 - wherein foil tracks lead from the housing.
10. (previously presented) The method according to claim 9, wherein an additional sensor for determining a self-heating of the control element is attached to the foil in the housing, whereby the housing is open in this area.
11. (previously presented) The method according to claim 9, wherein the photo sensor measuring incident sun radiation is attached to the foil, and that the housing has an infrared-light permeable area around the sensor.
12. (previously presented) The method according to claim 11, wherein when the photo sensor is arranged below the foil, the foil is made of infrared-light permeable material in this area.
13. (previously presented) The method according to claim 7, wherein the temperature sensor is manufactured utilizing MID technology.
14. (previously presented) The method according to claim 9, wherein the temperature

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sensor is manufactured foil injection technology.

15. (previously presented) The method according to claim 1, wherein the heat element is a NTC.

16. (previously presented) The method according to claim 1, wherein the interior temperature is the interior temperature of a motor vehicle.

17. (withdrawn) A method for determining a temperature of an interior of a vehicle, the method comprising:

measuring and storing a control value, the control value being representative of the temperature of a control element surface that is provided in the interior of the vehicle value and measured with a temperature sensor when there is no air movement within the interior of the vehicle;

providing a pulsed signal to a heat element so that the temperature sensor exhibits a temperature change;

measuring a step response of the temperature sensor;

comparing the step response of the temperature sensor with the control value;

determining a damping amount of the heat element on the basis of the comparison of the step response of the temperature sensor with the control value;

determining a presence or absence of air flow in the interior of the vehicle on the basis of a comparison of the damping amount with a predetermined value; and

determining the temperature of the interior of the vehicle on the basis of the

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determination of the presence or absence of air flow.

18. (withdrawn) The method according to claim 17, wherein a control of a heating and air-conditioning system of a vehicle is adjusted on the basis of the determination of the temperature of the interior of the vehicle.